User's Manual





Diagnostic Ophthalmic Software for PC & Mac.

TABLE OF CONTENTS

THANK YOU	
WINDOWS/PC	5
MACINTOSH	7
CALIBRATING THE SHARP SYSTEM V3 SOFTWARE	10
BASIC SHARP SYSTEM V3 OPERATIONS	11
PATIENT EDUCATION MODULE	13
ASTIGMATIC TESTS/CHARTS	14
KID'S FIXATION VIDEOS	14
MACULAR FUNCTION & INTEGRITY TESTS	15
LOW VISION TESTING	16
SOFTWARE REGISTRATION	16
CONTRAST TESTS/CHARTS	17
SHARP SYSTEM V3 PULL-UP MENU	18
OTHER TESTS/CHARTS	19
EXITING THE SHARP SYSTEM V3 SOFTWARE	19
SHARP SYSTEM CUSTOMER SERVICE AND TECHNICAL SUPPORT	20

Thank you for purchasing the Sharp System version 3 software for PC and Macintosh computers. In addition to the visual acuity testing software, you will find that the Sharp System v3 package includes a number of valuable and advantageous computer programs:



Sharp System Photo View

This easy to use program can be used to display high quality images for purposes of diagnosis, patient education, and/or product and service promotion. Images can be displayed in full screen mode and cycled for highly effective presentations.



Sharp System Media Player

Similar to Sharp System Photo View, this application will allow you to play educational and entertaining videos (DVDs included) for your patients—whether it is contact lens application, cataract extraction, or a cartoon for children during retinoscopy, this software will get the job done.



Please take a moment to review your new Single User License Agreement: END USER LICENSE AGREEMENT

The copyright owner of the Sharp System software, ("the Software"), the User's Manual, and the installation instructions is McPartland Ophthalmics ("McPartland Ophthalmics").

Ownership

You do not own the Software, nor the User's Manual or installation instructions. The Sharp System version 3 software is a registered copyright, and trademark. Under copyright law, McPartland Ophthalmics owns the Software and the incorporated literary work. Copyright in the Software is protected worldwide under the Berne Convention and the Universal Copyright Convention. McPartland Ophthalmics also owns all other title and intellectual property rights in and to the Software, the installation instructions, and User's Manual.

License

McPartland Ophthalmics hereby grants you the non-exclusive right to use the Software and the installation instructions for your personal use at a single location as long as you comply with the terms of this license.

Single User

The Licensed Materials and the information included therein are subject to change without notice. Sharp System disclaims any responsibility or obligation to update you with regard to any such change.

You agree to install and use the Software on <u>one computer only</u>, so that at any time, the maximum number of computers that can be executing the Software is one. The Software may be installed only into a single computer. You agree to strictly follow the installation instructions, when installing the Software.

You agree to use the software on one computer in one exam room at a single location (site). You agree to register your acquired copy of the Software by following such instructions in the User's Manual.

You agree not to:

- (a) Use the Software on more than one terminal or workstation of any network of computers or any Multi-user system. The maximum number of computers that can be executing the Software at any one time is one.
- (b) Use the Software on any time-sharing or interactive cable system. You may allow another person to use the Software on your computer, provided that person agrees to all of the terms of this license.

No modification.

Neither the Software, nor the User's Manual and/or installation instructions may be modified, adapted, translated, rented, leased, loaned, sold, sublicensed, transferred, distributed or networked, either temporarily or permanently, without the prior written consent of Sharp System or McPartland Ophthalmics. You may not create derivative works of the Software nor the data in it. You agree to take all reasonable steps to safeguard the Software and the installation instructions and to ensure that no one else shall have unauthorized assess to them. Any unauthorized act or transfer is a serious crime, and may be punishable by fine or jail sentence. You may not reverse engineer, decompile or disassemble the Software or any portion thereof.

The software may not be made available to any other person or organization without the consent of Sharp System. Resale is strictly prohibited. Any questions should be directed to Sharp System and McPartland Ophthalmics.

Termination of License

This license is effective from the day you pay for the Software, until terminated. You may terminate this license at any time, and must notify McPartland Ophthalmics in any such event. Notwithstanding anything to the contrary herein, the license rights granted herein are subject to your registering and paying for the Software, unless you pay for the Software (purchased only from McPartland Ophthalmics), and as a result of such payment, your receiving a Sharp System Customer Identification/Serial Number. This license is granted in perpetuity, but may be terminated if you are in breach of any of the terms of this agreement. Upon termination, you will destroy all hard and soft copies of the User's Manual, Installation Instructions, and all copies of the Software. All the provisions of this Agreement, which operate to protect the rights and interests of McPartland Ophthalmics, shall continue after termination.

Limited Warranty

If any law implies terms into this agreement which cannot be excluded, then they apply, except the liability of McPartland Ophthalmics for breach of such implied term will be limited at the exclusive option of McPartland Ophthalmics to the replacement of the Sharp System software. Except as specifically provided above, McPartland Ophthalmics makes no warranty either express or implied with the respect to the Software.

Limited Liability

McPartland Ophthalmics is not liable for any indirect or consequential or special damages nor for loss of profits or revenue or business interruption arising out of the breach of the terms of this license or arising out of defective Software, or improper use of software. User assumes all responsibility and liability. Be sure to verify proper optotype size before examination and testing.

Independent Judgment

You acknowledge that you have exercised your independent judgment in acquiring Sharp System and have not relied on any representation not stated expressly herein.

All questions concerning this Agreement should be directed to support@sharpva.com.

Windows/PC

Installation

- Insert the Sharp System CD-ROM, the Setup Menu should launch (if it does not auto-run within two minutes, you can manually start the setup by going to My Computer and clicking on the CD-ROM drive icon).
- 2. Once the Setup Menu appears, be sure to complete all three steps of the installation process.

One) Install Remote Control Driver.

Two) Select & Install the appropriate Sharp System software**
**based on monitor size and Mirrored room vs. Direct Viewing room.

Three) View the legally binding End User License Agreement.

Be sure to select the option that best suits your exam room. Remember, it is the responsibility of the physician/user to ensure and make certain that the proper version of Sharp System has been installed, calibrated, and verified. Once the remote has been properly installed, you will see the following icon in the system tray:



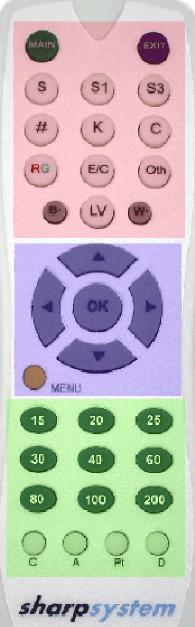
Please see the Sharp System Remote Guide on the following page for button functions.

Continue reading for additional Remote Guide and Button Functions.

*Note: If you are using the old Keyspan remote control and Windows operating system, please go to *remote.sharpva.com* for a detailed remote setup guide.

sharpsystem[™] Remote Control guide

	8	
MAIN EXIT S S1 S3 # K C RG E/C Oth LV B B W W	Brings Up Main Sharp System Selection ScreenExit Sharp SystemSingle Letter Isolation (selected optotypes only)Single Row Isolation (selected optotypes only)Three line letter presentationNumbersKindergarten ChartsContrast Testing ChartsRed-Green Overlay (selected optotypes only)Tumbling Es & CsOther testing charts (4-Dot Test, Fixation Disparity, etc)Low Vision Testing (optotypes from 20/200 to 20/1200 in size)Black Screen w/ White Fixation Dot (1st Push)Black Out (2nd Push)Robot Fixation (3rd Push)White Out (2nd Push)White Out (2nd Push)White Out (2nd Push)Robot Fixation (3rd Push)	
Up Down Left Right OK Menu	Increase Optotype Size/Menu NavigationDecrease Optotype Size/Menu NavigationChange Optotype Presentation (i.e., single line to single letter) /Menu NavigationChange Optotype Presentation (i.e., single letter to single line) /Menu NavigationRandomization of Letters (selected charts only) /Select on MenusBrings up Chart Selection Menu	
15 20 25 30 40 60 80 100 200 C A Pt D	Quick "Jump to" Optotype Selection Buttons Cartoon Selection MenuAstigmatic Chart Selection MenuPatient Education Selection Menu/Pathology PhotosThe Doctor Will Be Right With You" Screen (if pushed from chart testingScreen Saver (if pushed from MAIN menu))



Macintosh

Installation

1. Insert the Sharp System CD-ROM and double click on the Sharp VA icon on your desktop. Next, locate and open the folder titled "CustomSSv3". Once opened, please locate the setup file titled "SSv3.hqx".

Please note that in order to install the Sharp VA software on a Macintosh, you will need to unzip the SSv3.hqx file. This can be done by utilizing the free Macintosh application *Stuffit*.

2. Remote Setup (Keyspan Remote)

First, install the included Keyspan Remote software. Once the Remote Control software has been installed, see the following instructions:

A. Insert the Sharp System disc; open the folder titled "Other". Next, open the folder titled "Mac" and copy the file titled "sharpsystem.map".

This file will need to be pasted in the following directory:

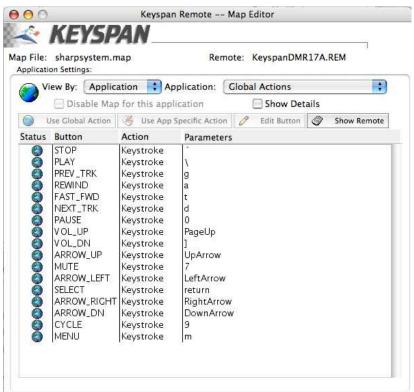
Macintosh HD > "Your Computer's Name" > Library > Preferences >

Keyspan DMR Preferences

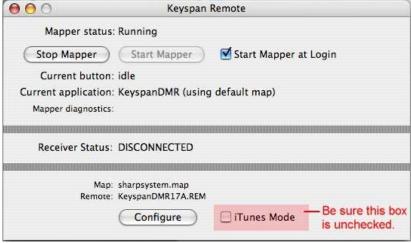
- B. Open the KeyspanDMR software application. Click on Configure. Then on the menu bar, go to Settings > Map File > sharpsystem.map
- C. Next, on the menu bar, go to Edit > New Application > and from here, select the Sharp System you have installed (i.e., SS 17M.exe).

Having Keyspan Remote Problems?

Please open the Keyspan DMR application and click Configure. Use the following image to edit your remote settings:

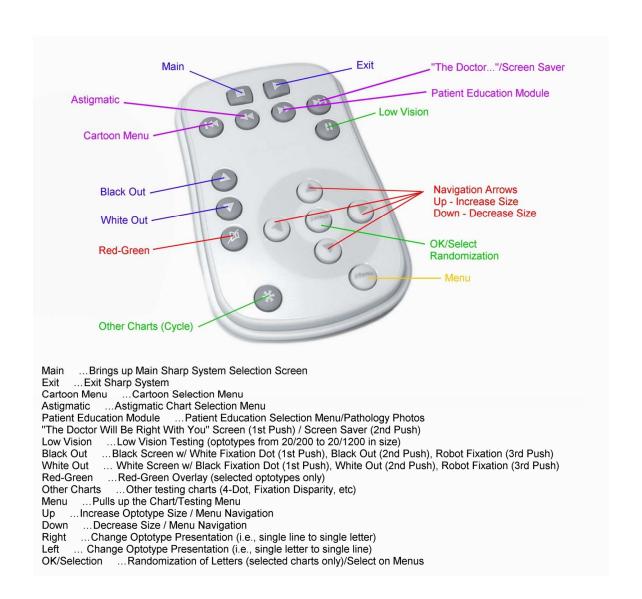


Now that your Map Editor matches the image above, save your Map file by going to **File** > **Save Map** (i.e., sharpsystem.map).



Be sure that the box titled "iTunes Mode" is unchecked.

Using the Keyspan Remote Control to Operate Sharp System v3



Calibrating the Sharp System v3 Software

The Sharp System v3 software is now truly custom software designed specifically for your exam room. The Sharp System v3 software comes precalibrated based on your effective optical lane distance, monitor size, and is also based on a mirror vs. direct view setup. Please note that the remote or a mouse can be used to make selections on this menu.



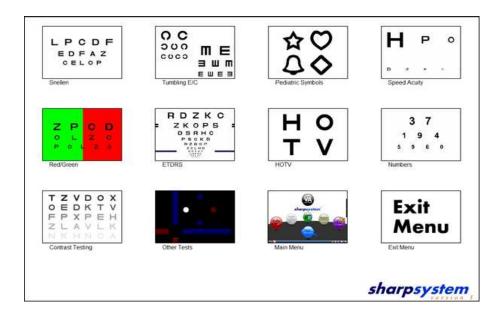
Pictured is the MAIN Sharp System menu, which can be accessed by pressing the **MAIN** button from any screen/chart in the software. Once you select the VA Testing Module, you will be taken to the Snellen three line acuity chart (S3).

It is from the MAIN menu that you can also access Astigmatic Charts, Macular Integrity Grids, Low Vision Optotypes, the Screen Saver, the Kid's Cartoons Menu, and the Patient Education Module.

Basic Sharp System v3 Operations

Once you have selected your lane size, you can switch between any of the Sharp System charts/tests quickly and easily by accessing the Sharp System v3 **Testing Menu**. This can be accessed by pressing the **Menu** button on your remote control or by pressing the **m** key on your keyboard.





Randomization

Press the OK button to randomize the optotypes (Snellen Three Line, Single Line, Single Letter with and without contour bars, Kindergarten Symbols).

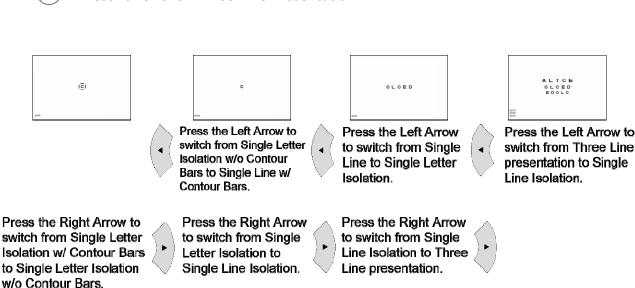
Easy Pointing Arrow

Some charts (HOTV and Pediatric/Kindergarten Single Line charts) contain an enlarged red pointing arrow (controlled by the mouse), as pictured below:



Shifting between **Three Line** to **Single Line Isolation** to **Single Letter Isolation** with and without contour bars.

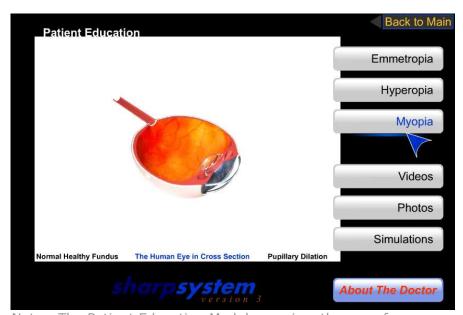
- S Press for Snellen Single Line Isolation (press the Left Arrow to show Contour Bars)
- (S1) Press for Snellen Single Line Isolation
- (\$3) Press for Snellen Three Line Presentation



- # Press to Display Number Charts (press Up and Down to display larger and smaller optotypes)
- Represe to Display Kindergarten Symbols (press Left and Right to display single line and single letters)
- (c) Press to Display Contrast Charts (press Right and Left to cycle through charts)
- Press to Display the Red-Green Overlay (Snellen Three Line, Tumbling Es, Kindergarten Symbols)
- (E/C) Press to Display Tumbling Es and Rolling Cs
- Oth Press to Display and cycle through the additional charts (Fixation Disparity w/ and w/o Fusion Lock, RG Balance, 4-Dot Test)
- Press to Display Low Vision Optotypes (20/200 through 20/1200)

Patient Education Module

The Sharp System v3 Patient Education Module includes images, diagrams, patient simulations, and videos.



Note: The Patient Education Module requires the use of a mouse.

Pictured is the first screen you will see in the Patient Education module. From this screen you have a number of options. Aside from Videos, Photos, and Simulations, you can also demonstrate to patients the effects of pupillary dilation, myopia, hyperopia, and emmetropia. Additionally, you can show the human eye in cross section and quickly show the patient an image of the normal healthy fundus.

Videos

Contains educational videos and is soon to be updated.

Photos

Contains numerous ocular images for educating patients.

Simulations

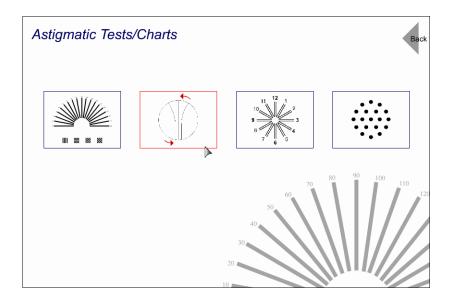
Contains images that are effective in demonstrating the natural history of ocular pathology as it applies to vision. The Simulations portion of the Patient Education module also contains a *Cataract Contrast Simulation*. This can be used to show the effects on contrast sensitivity from Mild, Moderate, and Severe cataracts. This can also be used to educate patients on Cataract Extraction and IOLs.

About The Doctor

This feature comes disabled in Sharp System v3 and can be added for an additional fee. This section may contain images, a slide show, or a looping video to introduce yourself and your staff to your patients.

Astigmatic Tests/Charts

This portion of Sharp System v3 needs little explanation.



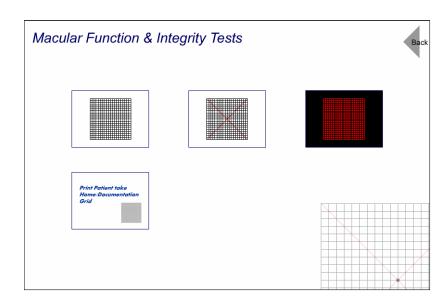
The second option under Astigmatic Tests/Charts contains a rotating dial. This can be rotated to the right and left by pushing the Right and Left arrow buttons (or the Right and Left arrow keys on the keyboard).

Kid's Fixation Videos

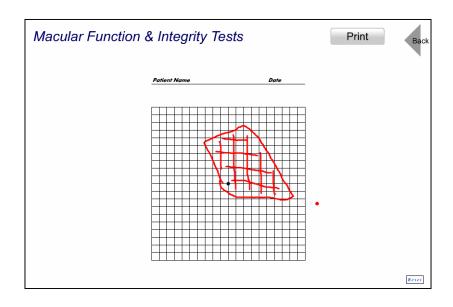
Note that to exit or stop a fixation cartoon, you simply push any button on the remote, or click anywhere with the mouse.

Macular Function & Integrity Tests

This portion of Sharp System v3 is intended for near viewing. As one can see from exploring the Sharp System v3 software or by viewing the image below, the Macular Function & Integrity Tests section contains three Macular Grids: Standard, Central Scotoma, and Color Scotoma.

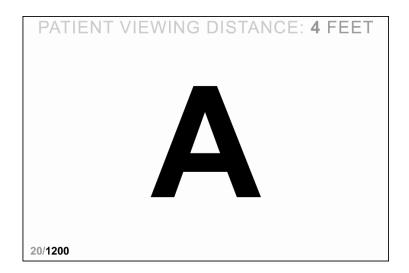


Included as a fourth item on the Macular Function & Integrity Tests menu is a printable grid. This grid can also be used to plot a patient's scotoma (or metamorphopsia). Once you select the Printable Grid, the mouse pointer becomes a small red dot—which can be used to localize abnormal macular areas.



Low Vision Testing

The Low Vision Testing module allows the clinician to measure visual acuities from optotypes of size 20/200 to size 20/1200. Due to the fact that large optotype sizes are limited by monitor size, the Low Vision Testing Module requires a testing distance specified at the top of the screen. To Exit the Low Vision Testing Module, press the MAIN button.



Software Registration

Register your software by going to the Sharp System v3 Main Menu. Click on *About* (lower right-hand corner), and then click on *Software Registration*. This will launch your web browser and take you to the Sharp System v3 Software Registration page.



Contrast Tests/Charts

Sharp System v3 includes two methods to asses the contrast sensitivity of a patient. The first consists of two charts—of equal optotype size—and varying levels of contrast. Each contrast level contains exactly three optotypes as is notated as a percentage on the left or right side of the screen.





For example, in the chart on the above left image the first three optotypes are **T Z V**; all of which are at a 90% contrast level (as notated by the "90" to the left of the three optotypes). The second group of three optotypes is **D Q X**; all of which are at a contrast level of 80%. This contrast chart continues in this progression.



The second method of contrast testing is in the form of a standard eye chart containing varying levels of acuity in descending order. The optotypes of this chart can be increased or decreased by pressing the Up and Down Arrow Buttons (or Up and Down keys on the keyboard). To alter the contrast levels, simply press the Right (to decrease) or Left (to

increase) Arrow buttons (or Right and Left keys on the keyboard).

Sharp System v3 Pull-Up Menu

Located on the MAIN menu in the lower left corner, you can click and "pull-up" this menu. From this menu you can easily connect to the Sharp System website and check for updates, contact Technical Support and/or Customer Service and submit a Support Ticket. From this menu you are also able to connect to the Sharp System custom add-ons page and view Sharp System Custom Solutions. These include creating custom videos/slideshows of your practice and/or promotional services/products for your office.



^{*} Internet connection required to connect to Sharp System website

Other Tests/Charts

Here you will find Fixation Disparity (with and without fusion lock), 4-Dot Test, and an additional chart for Red-Green balance. Included in the Sharp System v3 software package is a pair of high quality Red-Blue glasses that have been color matched to the Fixation



Disparity and 4-Dot charts. If you find that upon installation of the Sharp System software that these glasses are not negating the colors completely, you can simply adjust your monitor's color temperature settings to find the correct setting to cancel both the reds and blues.

Exiting the Sharp System v3 Software

To close the Sharp System software from any screen in the software, simply push the EXIT button. This will then take you to a screen to confirm your request to exit.



Sharp System Customer Service and Technical Support

Please use the following to resolve any issues that arise:

ask.sharpva.com

Online 24/7 Support Ticket. Best Option for tech support!

1-801-348-6561

Phone Customer Service and Technical Support.

support@sharpva.com

Sharp System e-mail Support.

www.sharpva.com or www.visualacuitysoftware.com

Sharp System Website.

Additional Sharp System Resources:

remote.sharpva.com

Order additional remote controls.

update.sharpva.com

Check for Sharp System software updates.

add.sharpva.com

Information on custom additions that can be made to the Sharp System software.

demo.sharpva.com

Sharp VA Demo Site

Sharp System (Sharp System 20/20 version 1, version 2, and Sharp System version 3) is a division of McPartland Ophthalmics. Copyright 2004-2008. All Rights Reserved.

